

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~Insulation~~ An insulation material element comprising:
~~element of mineral fibers, bound with a binding agent, soluble in a physiological milieu,~~
~~in form of an insulation material plate or to an insulation material sheet rolled up as a roll and~~
~~separable into insulation material plates as a portion of a system, prepared for clamped assembly~~
~~of insulation plates between beams, the composition of the mineral fibers of the insulation~~
~~material element featuring wherein the mineral fibers have an alkali/earth alkali relation of~~
~~<1[[,]] and a characterized in that their fiber structure of the mineral fibers includes a is~~
~~determined by an average geometric fiber diameter of $\leq 4 \mu\text{m}$, [[by]] and a gross density in the~~
~~range of 8 to 25 kg/m³, and wherein a portion of the binding agent comprises referred to a fiber~~
~~mass of the insulation material element in the range of 4% to 5.5 weight % by weight of the~~
insulation material.

2. (Original) Insulation material element according to claim 1, characterized in that said binding agent is an organic binding agent.

3. (Previously Presented) Insulation material element according to claim 1, characterized in that the binding agent, referred to the fiber mass of the insulation material sheet, is in the range of 4.5 to 5 weight %.

4. (Currently Amended) Insulation material element according to claim 1, characterized in that its gross density is in the range of 8 to 14 kg/m³, and the insulation material

element features a thermal conducting capacity corresponding to thermal conductivity group 040, according to DIN 18165 ~~or similar~~.

5. (Currently Amended) Insulation material element according to claim 1, characterized in that ~~their~~ its gross density is in the range of 18 to 25 kg/m³, and the insulation material element features a thermal conducting capacity corresponding to the thermal conductivity group 035, according to DIN 18165.

6. (Currently Amended) Insulation material element assembled between beams, ~~such as~~ to include roof rafters, without additional internal lining, according to claim 1, characterized in that it features a fire resistance category of at least EI 30, according to EN ~~113501~~ 13501.

7. (Currently Amended) Insulation material element according to claim 1, characterized in that ~~the roll-up process of the mineral fiber felt,~~ the element is rolled up in the form of a roll, and is ~~accomplished~~ free of a prior treatment, ~~eventually~~ and free of a fulling process.

8. (Currently Amended) Insulation material element according to claim 7, characterized in that the ~~wound-up~~ roll of the insulation material element of ~~miner~~ mineral fibers is compressed pursuant to a compression ratio of ~~[[1:3]]~~ 3:1 to 8:1.

9. (Currently Amended) Insulation material element according to claim 1, characterized in that ~~upon said section,~~ markings are provided on sections of the element and said markings serve as cutting aids, and are featured at least on one roll surface.

10. (Currently Amended) Insulation material element according to claim 1, characterized in that the mineral fibers of the insulation material element, ~~as far as their solubility in a physiological milieu is concerned~~, correspond in terms of its solubility in a physiological milieu to the requirement of European Guideline 97/69/EG and/or the requirements of the German Dangerous Products Norm, Section IV, Nr.22.

11. (Currently Amended) Insulation material element according to claim 1, characterized in that said mineral fibers of the insulation element are produced by internal centrifugation in ~~[[the]]~~ a centrifuging basket process, with a temperature at the centrifuging basket of at least 1,100 ° C.

12. (Previously Presented) Insulation material element according to claim 1, characterized in that it features a fusion point according to DIN 4102, Part 17, of $\geq 1,000$ ° C.

13. (Previously Presented) Insulation material element according to claim 1, characterized by the following ranges of chemical composition of mineral fibers in weight %:

SiO ₂	39 - 55
Al ₂ O ₃	16 - 27 %
CaO	6 - 20 %
MgO	1 - 5 %
Na ₂ O	0 - 15 %
K ₂ O	0 - 15 %

R_2O ($Na_2O + K_2O$)	10 – 14.7 %
P_2O_5	0 - 3 %
Fe_2O_3 (Iron total)	1.5 - 15 %
B_2O_3	0 - 2 %
TiO_2	0 - 2 %

14. (Currently Amended) Insulation material element according to claim 1, characterized in that ~~[[the]]~~ a fiber structure of the insulation material element is respectively free of beads, meaning ~~[[the]]~~ a bead portion is < 1%.

15. (Currently Amended) System for clamping insulation material elements between rafters of a building, in particular rafters of a roof, characterized by insulation material elements with the features of claim 1, being aligned and clamped with a clamping felt between adjacent ~~beams~~ rafters.

16. (Currently Amended) Insulation material element according to claim 1, characterized in that its gross density is in the range of 11 to 14 kg/m³, and the insulation material element features a thermal conducting capacity corresponding to thermal conductivity group 040, according to DIN 18165 ~~or similar~~.

17. (Currently Amended) Insulation material element according to claim 1, characterized in that its gross density is in the range of approximately 11 to 13 kg/m³, and the insulation material element features a thermal conducting capacity corresponding to thermal conductivity group 040, according to DIN 18165 ~~or similar~~.

18. (Previously Presented) Insulation material element according to claim 1, characterized in that their gross density is in the range of 19 to 24 kg/m³ and the insulation material element features a thermal conducting capacity corresponding to the thermal conductivity group 035, according to DIN 18165.

19. (Currently Amended) Insulation material element according to claim 1, characterized in that their gross density is in the range of 19 to 23 kg/m³ and the insulation material element features a thermal conducting capacity corresponding to the thermal conductivity group 035, according to DIN 18165.

20. (Currently Amended) Insulation material element according to claim ~~[[11]]~~ 1, characterized in that the ~~wound up roll of the~~ insulation material element of mineral fibers is compressed pursuant to a compression ration of 4:1 to 6:1.

21 (New) An insulation system especially adapted for use in a building, said system comprising:

a plurality of beams;

insulation elements suspended between the beams, said insulation elements comprising:

mineral fibers, bound with a binding agent, said mineral fibers having an alkali/earth alkali relation of <1, a fiber structure of the mineral fibers having a fiber diameter of $\leq 4 \mu\text{m}$, a gross density in a range of 10 to 25 kg/m³, and the binding agent being 4.5 % to less than 5 % by weight of the insulation material; and

wherein said insulation material exhibits a sufficient resetting behavior such that the insulation remains clamped between the beams by friction wherein the insulation elements are therefore clamping felts.